

In the Claims

Please amend claims 1, 4, 10, 13 and 19, cancel claims 3 and 12 and add claims 26 and 27:

1. (Currently Amended) An optical device extending along a geometric axis comprising:

- A) a final lens element formed from an initial lens element characterized by centered, rotational symmetry about an optical axis, said final lens element having polished image forming surfaces transverse to the geometric axis at each end of said final lens element and at least [[one]] three sawn planar [[face]] faces extending between said image forming surfaces [transverse to said geometric axis at each end of said final lens element, said at least one sawn planar face being] parallel to and spaced from the geometric axis, whereby said final lens element has the cross section of a polygon, and
- B) a sheath [[surrounding]] supporting said final lens element.

2. (Original) An optical device as recited in claim 1 wherein said sheath has a cylindrical cross section.

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3. (Cancelled).

4. (Currently Amended) An optical device as recited in claim [[3]] 2 having four planar surfaces whereby said final lens element has a rectangular cross section.

5. (Original) An optical device as recited in claim 4 wherein each of said sawn planar faces has an equal dimension whereby said final lens element has a square cross section.

6. (Original) An optical device as recited in claim 1 said final lens element is formed with a geometric axis that is parallel to the optical axis in said initial lens element.

7. (Original) An optical device as recited in claim 1 wherein said final lens element is inclusive of portions of said initial lens element including said optical axis.

8. (Original) An optical device as recited in claim 7 wherein said optical and geometric axes are parallel.

9. (Original) An optical device as recited in claim 7 wherein said optical and geometric axes are coincident.

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10. (Currently amended) An optical device extending along a geometric axis comprising:

- A) a final lens system formed from a plurality of adjoined initial lens elements having centered, rotational symmetry about an optical axis, each of said initial lens elements having a pair of spaced polished image forming surfaces transverse to the optical and geometric axes, said final lens assembly having at least [[one]] three sawn planar [[face]] faces extending along the length thereof parallel to and spaced from the geometric axis, whereby said final lens system, and each lens element therein has the cross section of a polygon, and
- B) a sheath surrounding and contacting said final lens assembly thereby to support [[the]] said final lens system along the geometric axis.

11. (Original) An optical device as recited in claim 10 wherein said sheath has a cylindrical cross section.

12. (Cancelled).

13. (Currently Amended). An optical device as recited in claim [[12]] 10 having four planar surfaces whereby said lens assembly has a rectangular cross section.

14. (Original) An optical device as recited in claim 13 wherein each of said surfaces has an equal dimension whereby said final lens system has a square cross section.

15. (Original) An optical device as recited in claim 10 wherein said final lens system is formed with a geometric axis that is parallel to the optical axis.

16. (Original) An optical device as recited in claim 10 wherein said final lens assembly is inclusive of portions of said lens elements including said optical axis.

17. (Original) An optical device as recited in claim 16 wherein said optical and geometric axes are parallel.

18. (Original) An optical device as recited in claim 16 wherein said optical and geometric axes are coincident.

19. (Currently amended) A method for making a lens system extending along a geometric axis comprising:

A) constructing an initial lens system with a least one lens element, each lens element having an optical axis and being characterized by a centered rotational symmetry about the optical axis and by polished image

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forming surfaces transverse to the optical axis, and

B) removing portions of the lens elements in the lens system by sawing thereby to form sawn planar faces on the lens system parallel to the geometric axis whereby said lens system has [a polygonal cross section] the cross section of a polygon.

20. (Currently Amended) A method as recited in claim 19 comprising the step of locating the polygonal lens system in a sheath with the intersections of said planar faces being in contact with the sheath.

21. (Original) A method as recited in claim 19 wherein said sawing includes position the lens system with respect to a saw and whereby portions of the lens element that are removed lie outside said portions of said lens elements inclusive of the geometric and optical axes whereby the final lens assembly includes both the optical and geometric axes.

22. (Original) A method as recited in claim 21 wherein said positioning enables the final lens system to have parallel optical and geometric axes.

23. (Original) A method as recited in claim 21 wherein said positioning enables the final lens system to have coincident

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optical and geometric axes.

24. (Original) A method as recited in claim 23 wherein said portions removal forms four intersecting sawn faces thereby to form the lens system with a rectangular cross section.

25. (Original) A method as recited in claim 23 wherein said portions removal forms four intersecting sawn faces thereby to form the lens system with a square cross section.

26 (new). A method as recited in claim 21 wherein said sawing includes sawing with a dicing saw.

27 (new). A method as recited in claim 19 wherein said sawing includes sawing with a dicing saw.